

Density of discontinuities in the heliosphere

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The spatial distribution of MHD discontinuities in the solar wind has been studied, based on the long time observations by the magnetometer onboard Ulysses. Since transient events in the streamer belt make the interpretation of the observations more complex, special attention is devoted to the study of the discontinuities in the steadier polar fast solar wind regime. We emphasize the critical importance of the method whereby events are selected; some previous work is critically reviewed in this respect. Our analysis supports earlier observations that the density of discontinuities decreases with increasing distance from the Sun. It is suggested, however, that the distribution of the discontinuity normals should be revised.